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EXAMINER	
PALIWAL, YOGESH	

ART UNIT	PAPER NUMBER
2135	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/774,334	PANINI, UGO	
	Examiner	Art Unit	
	Yogesh Paliwal	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2007 (Amendment)*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8,11 and 12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 11 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *5/18/2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/11/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

- Applicant's amendment filed on May 18,2007 has been entered. Applicant has amended claims 1,2,6,7,11,12 and cancelled claims 9-10. Currently claim 1-8, 11 and 12 are pending in this application. Any well known art statements made in the prior office action not argued by applicant is taken as admittance of prior art as per MPEP 2144.03
- Examiner acknowledge receiving a replacement sheet of drawings (Figures 4-5) with a revised Figure 5. The drawings were received on 5/18/2007. These drawings are acceptable. As a result, drawing objection is withdrawn.
- Examiner acknowledge receiving copies of missing references that were mentioned in the IDS. Accordingly, the examiner has considered the information disclosure statement and withdrawn IDS objection.
- Examiner acknowledge clarification of claim language of claims 2,6 and 7 for minor informalities, and also deletion of drawing numeral "29" from claim 2, as suggested by examiner. As a result, all claim objections previously presented are withdrawn.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 6, 7, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Jones (US 2003/0009420), hereinafter Jones, Paranjpe (US 5,651,620), hereinafter Paranjpe, and Nose et al. (US 2001/0048830), hereinafter Jones.

Regarding **Claim 1,** Jones discloses a scanner apparatus for scanning paper documents, of the type (Paragraph 0099, "document scanning system") comprising:

a first device for scanning bank checks (Paragraph 0099, "a check 1800 is placed into a scanning system..."), wherein the first device includes:

a first input receptacle for receiving at least one check to be scanned, the check including a front face and a rear face (Fig 18, Numeral 1810, Paragraph 0099, "...check 1800 is placed into a scanning system through an input receptacle 1810")

at least one first image-scanner unit for scanning at least one of the faces of the check, (Fig 18, Numeral 1840)

a first output receptacle for receiving the check after it has been scanned by the first scanner unit (Fig 18, Numeral 1830),

and a first conveyor mechanism for conveying checks, one at a time, from the first input receptacle to the first output receptacle, passing in front of the first scanner unit; (Fig 18, Numeral 1820, Paragraph 0099, "A transport mechanism...")

and the apparatus further comprising a second device for scanning other paper documents (Paragraph 0101, "the scanning system also includes a second input receptacle 815 adapted to receive invoices"), wherein the second device includes:

a second input receptacle for receiving at least one paper document to be scanned, the paper document including a front face and a rear face (Fig 18, Numeral 1815)

at least one second image-scanner unit for scanning at least one of the faces of the paper document, (Fig 18, Numeral 1845)

at least one second output receptacle for receiving the paper document after it has been scanned by the second scanner unit, (Fig 18, numeral 1835)

and a second conveyor mechanism for conveying paper documents, one at a time, from the second input receptacle to the second output receptacle, passing in front of the second scanner unit. (Fig 18, Numeral 1825, Paragraph 0101, "...a second transport mechanism 1825 transports the invoices to be paid...")

Jones does not teach:

the scanner apparatus being characterized in that:

the second image-scanner unit is mounted so as to be rotatable about an axis perpendicular to a path of movement of the paper document in order to be able to adopt a first angular position in which the second image-scanner unit is situated on one side of the path of movement in order to scan one face of the paper document and a second angular position to which the second image-scanner unit is rotated from the first angular position and in which the second image-scanner unit is situated on an opposite side of the path of movement in order to scan the other face of the document.

However, Paranjpe, in the same field of printing machines, discloses that printing unit (Fig. 1A, numeral 171 and corresponding description at column 12 lines 4-27) is

mounted so as to be rotatable about an axis perpendicular to a path of movement of the paper document (Fig. 1 which demonstrate overall printer that include rotatable print head, and Fig. 1A, numerals 171 and 171', also refer to corresponding description at column 12 lines 4-27) in order to be able to adopt a first angular position in which the image-printing unit is situated on one side of the path of movement in order to print on one face of the paper document (Fig. 1, first angular position is represented when print head is drawn with solid line in Fig. 1, detail view of that position is demonstrated at Fig. 1A, numeral 171, also refer to corresponding description at column 12 lines 4-27) and a second angular position to which the second image-printer unit is rotated from the first angular position and in which the second image-scanner unit is situated on an opposite side of the path of movement in order to print the other face of the document (Fig. 1, second angular position is represented when print head is drawn with solid line in Fig. 1, detail view of that position is demonstrated at Fig. 1A, numeral 171, also refer to corresponding description at column 12 lines 4-27).

Therefore, It would have been obvious at the time the invention was made to one of ordinary skill in the art to apply the teachings of rotatable print head unit about an axis perpendicular to a path of movement of the paper document as done by the print head of Paranjpe into the scan head of Jones to be able to scan both sides of paper without the need of having two scan heads and without the need of using mirrors with single scan head to print on both side. Using rotatable scan head, as suggested by Paranjpe instead of reflection technique using mirrors with single scan head of Jones, provides more precise scanning of data.

The combination of Jones and Paranjpe as applied above does not teach that the second conveyor mechanism comprises a pair of motor-driven rollers which are adapted to be rotated selectively and alternatively in two opposite directions of rotation in order to move the paper document in a first direction or in a second direction opposite the first direction.

However, Nose, in the same field of endeavor of scanning apparatus discloses conveyor mechanism comprises a pair of motor-driven rollers, which can be rotated selectively and alternatively in two opposite directions of rotation in order to move a document in one direction or in the opposite direction (Fig 3, Numerals 26 and 27, Column 1, lines 23-28, "discharge rollers that nip an end of the original document are caused to rotate in a reverse direction").

It would have been obvious at the time the invention was made to one of ordinary skill in the art to add pair of motor-driven rollers, which can be rotated selectively and alternatively in two opposite directions of rotation as taught by Nose at al. in the scanning system of Jones and Paranjpe combination so "that the document is moved backward and introduced into another paper path (second paper path)" (Column 1, lines 26-28).

Regarding **Claim 3,** the combination of Jones, Paranjpe and Nose teaches all the elements of claim 1 and Jones further discloses an electronic control unit which is connected to the first image-scanner unit of the first device in order to receive signals relating to the scanning of checks from the first unit, and to the second image-scanner

unit in order to receive signals relating to the scanning of the other paper documents from the second unit. (Fig. 18, Numerals 1850, 1840 and 1845),

Regarding **Claim 6**, the combination of Jones, Paranjpe and Nose teaches all the elements of claim 1 and Jones further discloses the second device for scanning paper documents is housed in the lower portion of the casing and in that the first scanning device is disposed in the upper portion of the casing. (Fig. 18, Numerals 1810 and 1815)

Regarding **Claim 7**, the combination of Jones, Paranjpe and Nose teaches all the elements of claim 1 and Jones further discloses the second scanning device comprises an input receptacle for paper documents, situated on a first side of the casing (Fig 18, Numeral 1815), and an output receptacle disposed on a second side of the casing opposite the first side (Fig 18, Numeral 1835).

Regarding **Claim 8**, while the combination of Jones, Paranjpe and Nose teaches all the elements of claim 7, it does not teach output receptacle situated on the first side of the casing.

However, Nose et al. in the same reference discloses output receptacle situated on the first side of the casing (Fig. 2, Numeral 7c).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to have output receptacle situated on the first side of the casing as taught by Nose et al. with the scanning system of the combination of Jones, Paranjpe and Nose to provide easy access to the documents after the scanning process completes.

Regarding **Claim 11**, the combination of Jones, Paranjpe and Nose teaches all the elements of claim 1 and Nose discloses that pair of motor-driven rollers is interposed between the second, rotatable scanner unit and an output receptacle for receiving the documents (It can be seen that both rollers are interposed between the second, rotatable scanner unit (Fig 3, Numeral 6) and an output receptacle for receiving the documents (Fig 2, 7C)).

Regarding **Claim 12**, the combination of Jones, Paranjpe and Nose teaches all the elements of claim 1, however, the combination as applied does not teach a deflector means which can permit the movement of a document from the second input receptacle to the second scanner unit along a first path and can deflect the document along a deflected path towards a further output receptacle when the document is moving in said opposite direction.

However, Nose et al. further discloses deflector means which can permit the movement of a document from the input receptacle to the scanner unit along a first path and can deflect the document along a deflected path towards a further output receptacle when the document is moving in said opposite direction (Fig 3, Numeral 37, column 5, lines 37-51, "The first guide member 37 can pivot up and down about a pivot center (shaft) 37a so that one of the paper paths R1 and R2 is blocked by the first guide member 37 and the paper can proceed in the other paper path"). [It can be seen that rotatable scanner unit (fig 3, Numeral 6) is interposed between the pair of motor-driven rollers (Fig 3, Numerals 26 and 27) and a deflector means (Fig 3, Numeral 37)]

It would have been obvious at the time the invention was made to one of ordinary skill in the art to further include a deflector into the combine system as taught by Jones, Paranjpe and Nose so that "when a user presses certain function keys and/or other keys on the control panel to bring the machine into a one-side scanning mode, the first guide member 37 pivots downwards to a lower position A, and the document is transmitted to the first paper path R1. On the other hand, when a user selects a both-side scanning mode, the first guide member 37 pivots to an upper position B, and the document is introduced to the second paper path R2" (Column 5, lines 44-51).

- Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Jones (US 2003/0009420), and Paranjpe (US 5,651,620) and Nose et al. (US 2001/0048830) and further in view of Murakami (US 5,912,747), hereinafter Murakami.

Regarding **Claim 2**, the combination of Jones, Paranjpe and Nose teaches all the elements of claim 1 and Jones further discloses an outer casing containing the first scanning device and the second scanning device (Fig 18), and for the second input receptacle, the outer casing has an input slot (Fig 18, Numeral 1815)

Jones does not expressively teach the width of the input slot to be at least 210 mm.

However Murakami in the same field of endeavor of scanning devices discloses an input slot with a width of at least 210mm (Fig.1, Numeral 10, Column 9 lines 60-67,

"...document D is set on...set for the A4 size original document) [It is well known in the art that the width of the standard A4 document is 210 mm].

It would have been obvious at the time the invention was made to one of ordinary skill in the art to set the width of the input slot as taught by Jones to 210 mm [Standard A4 format] as taught by Murakami because "generally, the size of an original document being used in an office is A4 size" (Column 10, lines 1-2).

- Claims 4 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Jones (US 2003/0009420), Paranjpe (US 5,651,620), Nose et al. (US 2001/0048830), and further in view of Reid-Green (US 4,971,309), hereinafter Reid-Green.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Jones, in combination with Reid-Green (US 4971309)

Regarding **Claims 4 and 5**, the combination of Jones, Paranjpe and Nose teaches all the elements of claim 3, and Jones further discloses that the electronic control unit is also operatively connected to drive/actuator means of the first conveyor mechanism for picking up at least one check from the first input receptacle and conveying the check to the first output receptacle, passing in front of the first scanning unit (Paragraph 0100, "The image scanner 1840 and the transport mechanism 1820 are electronically coupled to a controller 1850"). Jones also discloses the electronic control unit is also operatively connected to drive/actuator means of the second conveyor

mechanism for picking up at least one document from the second input receptacle and conveying the document to a second output receptacle, passing in front of the second scanner unit (Paragraph 0101, "...the scanning system also includes a second input...") [Jones doesn't expressively disclose that the controller is connected to the second transport mechanism as well, but it is implied that the controller 1850 is controlling the second transport mechanism 1825 as well, because there is no other controller disclosed to control the operations of second transport mechanism].

Jones further discloses one single USB or Ethernet serial communication bus operatively connected to the electronic control unit in order to transmit to the exterior the scanning data coming from all of the scanner units of the apparatus (Fig. 12, Numerals 1260, 1230, 1275). [Jones doesn't expressively disclose the interface to be a single USB or Ethernet serial communication bus, but the scope of interface does cover both USB and Ethernet interfaces].

The combination of Jones, Paranjpe and Nose doesn't teach the electronic control unit, which is also operatively connected to photocell means for detecting the presence of at least one check in the first and second input receptacle of the first and second scanning devices.

However, Reid-Green in the same field of endeavor of document feeding techniques discloses having a photocell means for detecting the presence of at least one check [sheet] in the input receptacle of scanning device (Column 4, lines 42-45, "A pair of photosensors 54 are mounted within alignment mechanism 32, to detect when the sheet has been inserted...") and also discloses the electronic control unit, which is

also operatively connected to photocell (Column 4, lines 46-48, "...photocell signals the scanner to start...").

It would have been obvious at the time the invention was made to one of ordinary skill in the art to implement photocell detector technique as taught by Reid-Green at both of the input receptacles of Jones when photocell detect the presence of sheet, "both photocells signals the scanner to start the vacuum and then the transporter belts [Start forward movement of the sheet], so that the sheet can be taken into the scanner" (Column 4, lines 46-48). Also by having the controller control the flow, "the auto feeder system detects the presence of a sheet on the platform and does not feed another sheet until the platform is clear" (Column 4, lines 64-66).

Response to Amendment

- Applicant has amended claim 1, which necessitated new ground of rejection. See rejection above.

Response to Arguments

- Applicant argues that: "neither Jones nor any of the other references cited by the Examiner disclose or suggest the claimed second image scanner and second conveyer mechanism".

Examiner totally disagrees with applicant's remark and still maintains that Jones reference as recited in previous office action clearly discloses second image scanner (at figure 18, numeral 1845, "Image scanner", and at paragraph 0101 "second image scanner 1845") and second conveyer mechanism (at figure 18, numeral 1825, and

at paragraph 0101, "...a second transport mechanism 1825 transports the invoices to be paid..."). Therefore, Jones clearly teaches these claimed limitations.

- Applicant further argues that: "In particular, none of the references cited by the Examiner disclose or suggest an image-scanner unit that is rotatable about an axis perpendicular to a path of movement of a document such that the image-scanner unit is able to be rotated and situated on opposite sides of the document--a full 180-degree rotation of the image-scanner unit around the document in order to scan both sides".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e." about an axis perpendicular to the path of movement of the document",) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner would like to point that the limitation "about an axis perpendicular to the path of movement of the document" was not present (Note: this limitation was presented in the original claim 10 however, applicant amended claim 10 before the first office action to remove this limitation) in the claim set previously presented for examination. As a result, adding this limitation with other limitations in claim 1 necessitated new ground of rejection.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh Paliwal whose telephone number is (571) 270-1807. The examiner can normally be reached on M-F: 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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